

WHAT IS CLAIMED IS:

1. A presensitized plate comprising:

an intermediate layer readily soluble in alkali; and
a photosensitive layer that can become alkali-soluble
by heating,

said layers being sequentially provided on a support
for a lithographic printing plate, provided by subjecting
an aluminum plate to graining treatment, alkali etching
treatment and anodizing treatment,

wherein an amount of alkali etching is set in a range
of 0.5 to 4 g/m² for said alkali etching treatment, and an
average thickness of thinnest 10% of said photosensitive
layer on convex portions of a surface of the support is set
in a range of 0.2 to 2 μ m.

2. A support for a lithographic printing plate, provided
by a treatment process including at least two or more steps
of subjecting an aluminum plate to graining and any one of
etching and desmutting steps between said graining steps,

wherein for a surface of said support, arithmetic
average roughness (R_a) measured in compliance with JIS
B0601-1994 is set in a range of 0.3 to 0.5 μ m,

for the surface of said support, 10-point average

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roughness (R_z) measured in compliance with JIS B0601-1994 is set in a range of 3.0 to 6.0 μm , and

for the surface of said support, the number P_c of roughness curve peaks is 15 or more per 1 mm, when a set value is 0.3-0.3 μm .

3. The support for a lithographic printing plate according to claim 2, wherein for the surface of said support, an 85-degree surface gloss regulated by JIS Z8741-1997 is set equal to 30 or lower.

4. The support for a lithographic printing plate according to claim 2 or 3, wherein said treatment process lastly includes a step of anodizing.

5. The support for a lithographic printing plate according to claim 2 or 3, wherein said treatment process lastly includes a step of anodizing, and then a step of water wettability treatment.

6. A presensitized plate comprising the support for a lithographic printing plate according to any one of claim 2 or 3 and a photosensitive layer thereof.

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7. A presensitized plate comprising the support for a lithographic printing plate according to any one of claim 4 and a photosensitive layer thereof.

8. A presensitized plate comprising the support for a lithographic printing plate according to any one of claim 5 and a photosensitive layer thereof.

9. A support for a lithographic printing plate, provided by a treatment process including at least two or more steps of subjecting an aluminum plate to electrochemical graining and any one of etching and desmutting steps between said electrochemical graining steps,

wherein for a surface of said support, in a filtered waviness curve measured at a cut-off value of 0.8 mm and an evaluation length of 6 mm in compliance with JIS B0610-1987, the number of waves having a depth of 0.3 μm or deeper is set in a range of 35 to 60, and the number of waves having a depth of 1.0 μm or deeper is 5 or less,

for the surface of said support, arithmetic average roughness measured at the cut-off value of 0.8 mm and the evaluation length of 6 mm in compliance with JIS B0601-1994 is set in a range of 0.35 to 0.5 μm , and

uniform honeycomb pits having a diameter set in a

range of 0.5 to 2 μm are provided on a full surface of said support.

10. The support for a lithographic printing plate according to claim 9, wherein for the surface of said support, an 85-degree surface gloss regulated by JIS Z8741-1997 is set equal to 30 or lower.

11. The support for a lithographic printing plate according to claim 9 or 10, wherein said treatment process lastly includes a step of water wettability treatment.

12. A method for preparing a support for a lithographic printing plate, having a treatment process including at least two or more steps of subjecting an aluminum plate to electrochemical graining and any one of etching and desmutting steps between said electrochemical graining steps, comprising the steps of:

performing one electrochemical graining to form a surface having the number of waves of a depth 0.3 μm or deeper set in a range of 35 to 60, and the number of waves of a depth 1.0 μm or deeper set equal to 5 or less, in a filtered waviness curve measured at a cut-off value of 0.8 mm and an evaluation length of 6 mm in compliance with JIS

B0610-1987; and

performing another electrochemical graining.

13. A presensitized plate comprising the support for a lithographic printing plate according to claim 9 or 10 and a photosensitive layer thereof.

14. A presensitized plate comprising the support for a lithographic printing plate according to claim 11 and a photosensitive layer thereof.

15. A support for a lithographic printing plate, provided by subjecting an aluminum plate to graining treatment, wherein for a surface of said support, the number of concave portions within 1 mm is ten or less, each of said concave portions having a width of 8 μ m or wider, alternatively a maximum depth of 1.7 μ m or deeper in a direction perpendicular to the width, and for the surface of said support, an 85-degree surface gloss regulated by JIS Z8741-1997 is 30 or lower.

16. A presensitized plate comprising the support for a lithographic printing plate according to claim 15 and a recording layer thereof,

said recording layer containing infrared absorbent and a high-molecular compound insoluble in water and soluble in an alkali aqueous solution, wherein solubility to an alkali developer is increased by infrared laser exposure.

17. A support for a lithographic printing plate, provided by subjecting an aluminum plate to graining treatment and anodizing treatment,

wherein when a diameter and a density of a micropore present in an anodized layer are respectively $d(m)$ and ρ (number of micropores / m^2), both satisfy an expression (i) below:

$$0.5 < \pi (d/2)^2 \times \rho < 2.0 \quad (i)$$

18. A presensitized plate comprising the support for a lithographic printing plate according to claim 17 and a recording layer thereof,

said recording layer containing infrared absorbent and a high-molecular compound insoluble in water and soluble in an alkali aqueous solution, wherein solubility to an alkali developer is increased by infrared laser exposure.